

REMARKS

In response to the Office Action dated January 27, 2003, reconsideration of the application in view of the following remarks is respectfully requested. Claims 1-33 are currently pending in the application. Reconsideration of the claims in view of the following remarks is respectfully requested.

The Applicant respectfully asserts that the inventorship has changed during the course of prosecution of the application. The Applicant respectfully amends and limits the Inventorship of the instant application to only one sole inventor as follows. The sole inventor of the currently claimed invention is Stephen T. Kuehn only. The Applicant respectfully points the Examiner to MPEP 201.03, 35 U.S.C. § 116 and 37 C.F.R. 1.48(b) which authorize amendment of inventorship in a response to a final Office Action. In further support of the change in inventorship, the Applicant respectfully points the Examiner to the second assignment recorded in the USPTO on October 9, 2002 at reel 013363, frame 0229. The Applicant requests that the Examiner contact the Applicant's representative to resolve any further issues regarding the change in inventorship set forth above.

The Applicant respectfully requests that the finality of the Office Action dated January 27, 2003 be withdrawn for the following reasons.

The Applicant respectfully submits that the amendments made to claims 1 and 18 did not narrow the scope of the claims, but rather clarified the language of the claims. Because the scope was not narrowed, the Applicant respectfully submits that the amendment did not necessitate new grounds of rejection. Instead, the clarification and accompanying remarks more clearly distinguished the Applicant's claimed invention from the cited reference, as stated in the Office Action on page 7 under the heading Response to Arguments.

Further, the Applicant respectfully submits that the Office Action did not address the amendment of claim 14. Claim 14 was amended to set forth that the ring is releasably attachable to the applicator. However, the rejection of claim 14 appears to have been "cut and pasted" from a previous Office Action and directed to a previous version of claim 14. The Office Action does not identify how the Bergman reference

teaches or suggests that the ring is releasably attached to the applicator, leaving the Applicant to question whether the limitation has been considered.

Additionally, the Applicant respectfully submits that the Office Action did not address the amendments to claim 18. Claim 18 was amended to set forth that the flexible rod connects to the cap to provide for movement of the cap relative to the pivot of the gripper and that the cap has an opening that can be positioned over the pivot to lock the arms in a closed position. However, the rejection of claim 18 also appears to have been "cut and pasted" from a previous Office Action and directed to a previous version of claim 18. The Office Action does not identify how the King reference teaches or suggests that the flexible rod connects to the cap to provide for movement of the cap relative to the pivot of the gripper and how the cap has an opening that can be positioned over the pivot to lock the arms in a closed position, leaving the Applicant to question whether the limitations have been considered.

For at least the reasons set forth above, the Applicant respectfully submits that the decision to make the rejections final in the previous Office Action was improper and unjustified. The Applicant respectfully requests that the finality of the previous Office Action be immediately withdrawn and that no Advisory Action be issued in response to the Applicant's instant *bona fide* good faith response thereto.

On page 2 of the Office Action, claims 1-13 were rejected under 35 U.S.C. §102(e) as being anticipated by Oz, et al., U.S. 6,269,819 (Oz). The Applicant respectfully traverses the rejections.

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Therefore, all claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. § 102. The Applicant respectfully submits that Oz does not teach every element of independent claim 1, and therefore fails to anticipate claim 1.

The Applicant sets forth in claim 1, a heart valve leaflet fastener including at least one pair of arms. The pair is sized and adapted for fastening two adjacent heart valve leaflets. The arms pivot from one orientation to a gripping position with ends of respective paired arms being directed toward each other.

Oz is different from the Applicant's claimed invention. Oz teaches (Figs. 8 and 9) a grasper device having movable jaws 52. The movable jaws 52 are provided with protruding grasping surfaces 58 located intermediate the length of the jaws 52. The grasping surfaces 58 located in the middle region of the jaws 52 are directed toward each other. However, the ends of the jaws 52 are not directed toward each other. Oz, as shown in Figs. 8 and 9, is at least different than the Applicant's claimed invention because Oz teaches the grasping surface at the middle of the jaws being directed toward each other whereas the Applicant sets forth that the ends of the pair of arms of Applicant's surgical instrument are directed toward each other.

In Figs. 18-20, Oz teaches a tool for deploying two separate grasping devices 136 that, when affixed to a pair of heart valves 144, forms a closure member 134. The two grasping devices 136 are not connected and are unable to pivot from one orientation to a gripping position. Oz, as shown in Figs. 18-20, is at least different from the Applicant's claimed invention because the grasping devices 136 are separate members and are unable to pivot from one orientation to a gripping position whereas the Applicant sets forth a pair of arms that pivot from one orientation to a gripping position with ends of the pair of arms directed toward each other. The Applicant also respectfully submits that the Applicant's claimed invention is neither anticipated by nor obvious in view of the teaching of Oz.

For at least the reasons set forth above, the Applicant respectfully submits that Oz fails to teach or suggest every feature set forth in Applicant's independent claim 1. Because, claim 1 is not anticipated by Oz, claim 1 is allowable over the cited reference. The Applicant respectfully requests that the rejection of claim 1 be withdrawn.

Dependent claims 2-13, which are dependent from independent claim 1, were also rejected under 35 U.S.C. § 102(e) as being unpatentable over Oz. While the Applicant does not acquiesce to the particular rejections to these dependent claims, it is asserted that these rejections are moot in view of the remarks made in connection with

independent claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent claims 2-13 are also in condition for allowance. The Applicant respectfully requests that the rejection of claims 2-13 be withdrawn.

On page 4 of the Office Action, claims 14, 15, and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by Bergman et al., U.S. 5,181,919 (Bergman). The Applicant respectfully traverses the rejections and submits that Bergman does not teach every element of independent claim 14, and therefore fails to anticipate claim 14.

The Applicant sets forth in claim 14, a heart valve repair instrument including a ring and a ring applicator. The ring is releasably attachable to the applicator. The ring includes two pointed shafts. The applicator can apply a force to the ring to bring the points of the shafts toward each other relative to an initial position. The ring and applicator have an appropriate size for placement within a chamber of a human heart.

Bergman is different from the Applicant's claimed invention. Bergman teaches a suture ligating device. Bergman teaches in Fig. 3 an elongated integral member 12 including elongated prongs 22 and 23 having curved ends ending in a suture carrying mechanism 16 and a suture grasping mechanism 17 to suture inside a body cavity. Bergman is at least different from the Applicant's claimed invention because Bergman teaches an elongated member having generally curved ends. Moreover, the invention of Applicant's claim 14 includes a ring and a ring applicator, the ring being removably attachable to the ring applicator to pierce and secure together heart valve leaflets (see Figs. 34-37 and 39). Bergman merely provides means for suturing whereas the Applicant sets forth a device for deploying a ring within a human heart (see Fig. 39).

For at least the reasons set forth above, the Applicant respectfully submits that Bergman fails to teach or suggest every feature set forth in Applicant's independent claim 14. Because claim 14 is not anticipated by Bergman, claim 14 is allowable over the cited reference. The Applicant respectfully requests that the rejection of claim 14 be withdrawn.

Dependent claims 15 and 17, which are dependent from independent claim 14, were also rejected under 35 U.S.C. § 102(b) as being unpatentable over Bergman. While the Applicant does not acquiesce to the particular rejections to these dependent

claims, it is asserted that these rejections are moot in view of the remarks made in connection with independent claim 14. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent claims 15 and 17 are also in condition for allowance. The Applicant respectfully requests that the rejection of claims 15 and 17 be immediately withdrawn.

On page 4 of the Office Action, claims 18-22, and 24-33 were rejected under 35 U.S.C. § 102(b) as being anticipated by King et al., U.S. 3,874,388 (King) and on page 6, dependent claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over King.

The Applicant notices that in the heading on page 4 for the rejections under King, the Office Action did not list claims 30-33. However, rejections to claims 30-33 were made in subsequent paragraphs on pages 5 and 6. The Applicant respectfully submits that King does not teach every element of independent claims 18 and 30, and therefore fails to anticipate claims 18 and 30.

The Applicant sets forth in claim 18, a heart valve repair instrument including a shaft, a cap, a gripper and a flexible rod. The gripper includes a plurality of arms radiating from a pivot with each arm having a spike. The cap is located distal to the pivot and the pivot is located distal to the shaft. The flexible rod connects to the cap to provide for movement of the cap relative to the pivot of the gripper and the shaft by pulling the flexible rod. The cap has an opening that can be positioned over the pivot to lock the arms in a closed position.

King is different from the Applicant's claimed invention. King teaches (Figs. 7 and 8) an instrument for closing a defect in a heart wall including a plurality of struts 81, 91 attached to a hub 84. The struts 81, 91 are operable through a plurality of manipulating ties 7 connected to the struts 81, 91. King teaches that the struts may be covered by umbrella like elements 8, 9 for causing the struts to expand and open. King also teaches (Fig. 8) that a loading cone 4 may be provided on the end of the catheter to collapse the struts and to permit entry of the instrument into the catheter.

King is also different from the Applicant's claimed invention because King teaches an instrument having a central hub and a plurality of struts being openable via a plurality

of manipulating ties. The Applicant sets forth a heart repair instrument having a gripper having a plurality of arms connected at a pivot and a cap having a opening, such that when the opening of the cap is positioned over the pivot, the arms are locked into a closed or collapsed gripping position (see for example, Figs. 15A-15F).

Further, the Applicant respectfully disagrees with the Office Action's characterization that the umbrella-like structures 8 are a cap as disclosed in the Applicant's claimed invention. The umbrella-like structure 8 disclosed in King is unable to perform the function of positioning a cap over a pivot to lock a plurality of arms in a closed or collapsed position. Instead, the umbrella-like structure expands the struts in King to the fully open position (col. 8, line 67 through col. 9, line 6).

For at least the reasons set forth above, the Applicant respectfully submits that King fails to teach or suggest every feature set forth in Applicant's independent claim 18.

Claim 30 sets forth features similar to those set forth in claim 18 and was also rejected as being unpatentable under King. Claim 30 is not anticipated by King for at least the same reasons as those provided for claim 18.

Because, claims 18 and 30 are not anticipated by King, claims 18 and 30 are allowable over the cited reference. The Applicant respectfully requests that the rejection of claims 18 and 30 be withdrawn.

Dependent claims 19-29 and 31-33, which are dependent from independent claims 18 and 30, were also rejected under either 35 U.S.C. § 102(b) or 35 U.S.C. § 103(a) as being unpatentable over King. While the Applicant does not acquiesce to the particular rejections to these dependent claims, it is asserted that these rejections are moot in view of the remarks made in connection with independent claims 18 and 30. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent claims 19-29 and 31-33 are also in condition for allowance. The Applicant respectfully requests that the rejection of claims 19-29 and 31-33 be withdrawn.

In view of the reasons provided above, it is asserted that all pending claims are in condition for allowance. The Applicant respectfully requests favorable reconsideration and early allowance of all pending claims.


If a telephone conference would be helpful in resolving any issues concerning this communication, please feel free to contact the Agent for the Applicant, Fredrick T. French III at (952) 253-4123.

Respectfully submitted,



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